



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,278	12/15/2005	Dieter Minninger	2003P00692WOUS	5659
22116	7590	09/10/2008	EXAMINER	
SIEMENS CORPORATION			KERSHTEYN, IGOR	
INTELLECTUAL PROPERTY DEPARTMENT				
170 WOOD AVENUE SOUTH			ART UNIT	PAPER NUMBER
ISELIN, NJ 08830			3745	
MAIL DATE		DELIVERY MODE		
09/10/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,278	Applicant(s) MINNINGER, DIETER
	Examiner Igor Kershteyn	Art Unit 3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 June 2008.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 12,13,15-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 12,13,15-17 and 22 is/are rejected.
- 7) Claim(s) 18-20 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 January 2008 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 12, 13, 15-17, and 22, drawn to a turbo-machine, classified in class 415, subclass 115.
- II. Claims 18-20, drawn to a method of cooling a rotor of a turbo-machine and a method of heating a rotor of a turbo-machine, classified in class 60, subclass 226.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the method of cooling/heating a rotor as claimed can be practiced with another materially different product.

During a telephone conversation with Mr. John P. Musone (Reg. No. 44,961) on 09/08/08 a provisional election was made without traverse to prosecute the invention of group I, claims 12, 13, 15-17, and 22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18-20 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains legal phraseology "means". Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13, 17 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the rotor shaft" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "the feed" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "the rotor shaft" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 recites the limitation "the rotor shaft" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12, 15, and 17 are rejected under 35 U.S.C. 102(a) as being anticipated by Care et al. (6,485,255).

In figures 1-3, Care et al. teaches a turbo-machine 20, comprising: a rotor 52 rotatably mounted in a casing (not numbered) of the turbo-machine; a feed passage 74 arranged in the rotor for providing a fluid; and a discharge passage 76 arranged in the rotor for discharging the fluid; wherein the discharge passage has a throttle element 114, and wherein a feeding opening (not numbered) of the feed passage is radially further on the inside than an outlet opening 118 of the discharge passage.

Claims 12, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (4,184,797).

In figures 1-7, Anderson et al. teach a turbo-machine, comprising: a rotor 12 rotatably mounted in a casing of the turbo-machine; a feed passage 46 arranged in the rotor for providing a fluid; and a discharge passage 52-38,60-39,52'-40 arranged in the rotor for discharging the fluid; wherein the discharge passage has a throttle element 41, and wherein a feeding opening 47,48,49 of the feed passage is radially further on the inside than an outlet opening 52,60,52' of the discharge passage.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (4,184,797) in view of Kumata et al. (4,967,552).

Anderson et al. teach all the claimed subject matter except that they don't teach an actuating arrangement for influencing the fluid flow is connected to the discharge passage via a gap formed between moving-blade wheels and an element projecting axially through the rotor shaft.

Kumata et al., in figures 1 and 2, teaches a cooling arrangement for a turbo-machine having an actuating arrangement (See figure 1) for influencing the fluid flow connected to the discharge passage 10 via a gap formed between moving-blade wheels

and an element (bolt that holds the rotor discs together) projecting axially through the rotor shaft (not numbered).

Since Anderson et al. and Kumata et al. are analogous art because they are from the same field of endeavor, that is the turbine gas engine cooling art, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the cooling arrangement of Anderson et al. with the actuating arrangement for influencing the fluid flow connected to the discharge passage via a gap formed between moving-blade wheels and an element projecting axially through the rotor shaft as taught by Kumata et al. for the purpose of controlling the cooling capacity of the cooling fluid portion supplied to the rotor side in accordance with starting characteristics and operating condition parameters of the gas turbine.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Care et al. (6,485,255) in view of Pineo et al. (4,815,928).

Care et al. teach all the claimed subject matter except that they don't teach the fluid flow is influenced by a shutoff element that is actuated as a function of a speed of the rotor shaft.

Pineo et al., in figure 1 and abstract, teaches a turbo machine cooling arrangement wherein the fluid flow 6 is influenced by a shutoff element 33 that is actuated as a function of a speed of the rotor shaft.

Since Care et al. and Pineo et al. are analogous art because they are from the same field of endeavor, that is the turbine gas engine cooling art, it would have been

obvious at the time the invention was made to a person having ordinary skill in the art to modify the cooling arrangement of Care et al. with the shutoff element that is actuated as a function of a speed of the rotor shaft as taught by Pineo et al. for the purpose of elimination of cooling flow when it is not needed.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is **(571)272-4817**. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on **(571)272-4820**. The fax number is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is **(703) 308 0861**.

/Igor Kershteyn/
Primary Examiner, Art Unit 3745